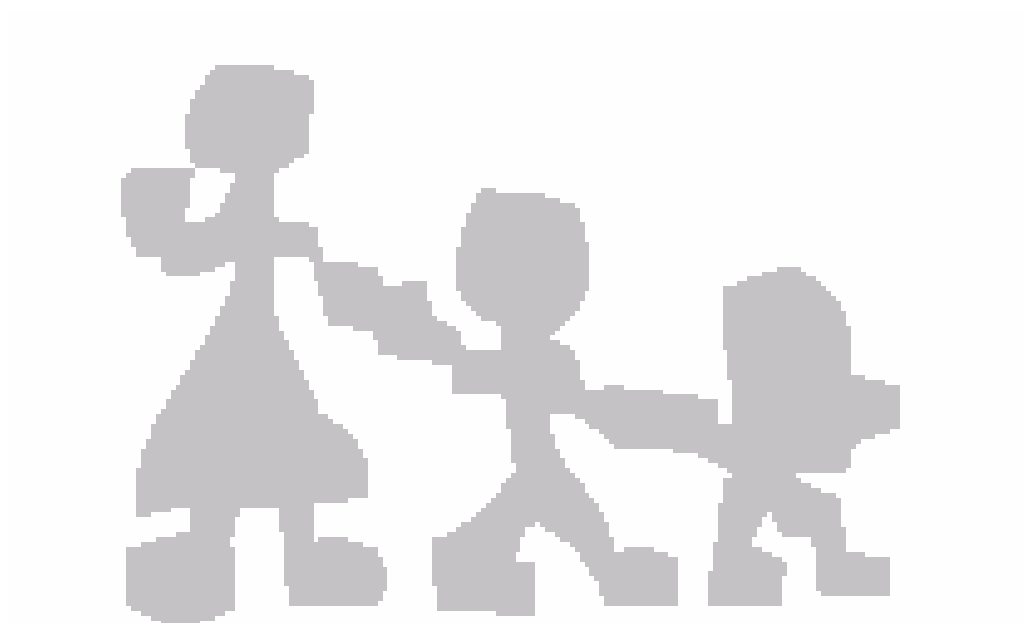


Teachers' perceptions of emotional and behavioral problems in 6-12 year old Norwegian school children



Jim Lurie

**Barnevernets utviklingssenter i Midt-Norge
Rapport fra screeningsundersøkelsen i Møre og Romsdal, knyttet til
prosjektet "De utrolige årene" (Webster-Stratton programmet)**

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behavioral problems in 6-12 year old
Norwegian school children**

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Referat: Dette er en undersøkelse av forekomsten av atferdsproblemer hos barn i alderen 6-12 år, i 5 kommuner i Møre og Romsdal. Barnas problemer er målt ved bruk av et spørreskjema - Teacher's Report Form (TRF) - som registrerte lærernes oppfatning av ulike vanskelig atferd elevene har vist i siste periode. Forekomsten av problemer varierte i forhold til barnas kjønn, alder og bosteds kommune. Kjønn hadde størst effekt, og gutter vist mer problemer totalt og mer eksternaliseringsproblemer. Norsk elever hadde færre problemer, enn elever av samme alder undersøkt i Danmark, Nederland og USA med samme instrument.

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Preface

This study has been carried out by the Regional Child Protection Research Unit in Trondheim with financing from the Norwegian Directorate for Health and Social Affairs and the Regional Center for Children and Young People's Mental Health for Health Region Northern Norway. It is part of a larger research initiative focused on children and young people with behavior problems, including a treatment trial of the Webster-Stratton Parent Training Program, "The Incredible Years", in Trondheim and Tromsø. Previous publications from this initiative include: "Parenting a Young Child with Behavior Problems: Parents' experiences before, during and after Webster-Stratton Parent Training", J. Lurie & G. Clifford, 2005, and "Informasjonsarbeid i ukjent terreng: Om rekruttering av små barn med atferdsvansker til Webster-Stratton programmet (Information work in an unknown environment: Recruitment of small children with behavior problems to the Webster-Stratton program), T. Tjelflaat et al., 2002.

This study is based on questionnaires (Teacher's Report Form) filled out by teachers from 38 elementary schools from 5 towns in Møre and Romsdal in the spring of 2002. We would like to thank the teachers who filled out these questionnaires and the parents of the pupils who consented to participation in the study. We would also like to thank school administrators in these towns for their cooperation in permitting the study to be carried out, and for their assistance in helping to implement the survey at the local level. These include: Birger Saltbones and Tove Øksenvåg Johansen from Averøy, Petter Ingeberg and Bjørn Elgsaas from Kristiansund, Morten Lerø, Bente Stokkeland, Judit Fugelsnes, and Gro Toft Ødegård from Molde, Dag Eirik Elgsaas from Sunndal, and Oddvin Meland from Surnadal.

This study has involved the efforts of a number of researchers and staff. These were employed at the Regional Child Protection Research Unit in Trondheim unless otherwise specified. The study was designed and initiated by Professor Graham Clifford and research director Torill Tjelflaat, as part of a larger initiative focused on the treatment of children with severe behavioral problems. Researcher Geir Hyrve participated in the early phases of the project, including establishing the network of school administrators and supervising initial data collection efforts. Data entry (SPSS) and data quality control was done by research assistants Kusuma Beathe Chanont and Tore

Schanke. Two colleagues from the Regional Center for Children and Young People's Mental Health for Health Region Northern Norway provided valuable support for the project. These were Professor Willy-Tore Mørch who assisted in securing financing to complete the project and was a valuable discussion partner regarding the design and focus of the analysis, and statistician Bjørn Helge Handegård who was responsible for replacement of missing data and provided useful statistical advice on several issues including the choice of appropriate statistical tests and measurement of effect size. Senior researcher Jim Lurie supervised data processing and quality control, analyzed the data and wrote this report.

We hope this report will provide useful information about the prevalence of children's behavioral and emotional problems as perceived by their teachers, and that this information can assist in assessing the need for different types of services.

Trondheim, September 2006

Jim Lurie

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Summary

The purpose of this study is to provide prevalence rates on a wide range of emotional and behavioral problems as reported by teachers of Norwegian school children 6-12 years of age. The study also identifies differences related to socio-demographic variables - age, gender and place of residence of the children. Results of the study were compared with those of other epidemiological studies using the Teacher's Report Form (TRF) in Norway and other countries.

The study was a screening of all school children attending grades 1-6 in the spring of 2002 in five Norwegian towns in the county of Møre and Romsdal - Averøy, Kristiansund, Molde, Sunndal and Surnadal. The screening was conducted using a standardized psychological assessment instrument, the TRF. This instrument was developed in the United States to measure pupils' behavior problems as perceived by their teachers. Data was collected for nearly 2700 pupils, a 62 % survey response rate. Scores were analyzed for individual problem items and for three scales for total problems, externalizing and internalizing.

Significant differences were found for the socio-demographic variables gender, age and population size of the children's town of residence. Gender had the greatest effect on the children's behavior problems, with boys displaying more total problems and externalizing problems than girls, overall, and in each age group (other than 6 year-olds). This is consistent with previous research findings. Boys' most prevalent individual problem items were in the categories attention problems and externalizing, while girls' most prevalent problem items were internalizing problems.

Significant differences were also found for children's age and town population size (larger vs. smaller towns), but these differences had very small effect size. Pupils aged 7, 10 and 11 years scored highest on all three problem scales, with significant differences for internalizing only. Pupils from smaller towns had more total problems and externalizing problems, while their counterparts from larger towns had more internalizing problems. Town size differences were significant for internalizing and externalizing.

The TRF scores on all three problem scales (total problems, internalizing, and externalizing) from the present study were lower than those in other countries including the

USA, Denmark and the Netherlands, which have established standardized norms for the TRF. This is consistent with previous research showing lower scores for Scandinavian children on instruments measuring behavior problems, than for children from non-Scandinavian countries. Scores from the present study were much closer to those of several previous Norwegian studies with the TRF for a small control group from the general population.

Some strengths of the present study include a large sample from the general child population, a good response rate for surveys of this kind, and inclusion of towns of varying population size and type of economic activity from the county of Møre and Romsdal. Limitations of the present study include the possibility of non-response bias, questions about the generalizability of the results to a broader population including school children in the same age range in Norway as a whole, and minor differences between the version of the TRF used in this study versus the original US instrument including the omission of questions on social competence and an open-ended question on other behavior problems.

1. Introduction

Assessing the prevalence of emotional and behavioral problems in children and adolescents can provide useful information about the frequency of such problems in a particular culture, which problems are most common, and how these are distributed in the child population, for instance relative to gender and age. Such information can be valuable in assessing the need for different types of services including school counseling, special education, parent training, therapy and other types of intervention.

The first systematic child psychiatric epidemiologic study was conducted nearly 50 years ago to determine the frequency of parent-reported problem behaviors in a representative sample of children aged 6-12 years in Buffalo, New York. Mothers reported unexpectedly high rates of problem behavior (Lapouse & Monk 1958). This was followed by the influential Isle of Wight studies in the 1960s which focused on educational, psychiatric and physical disorders in children, using a sound methodology combining statistical and clinical techniques (Rutter et al. 1970, 1976). Since that time, extensive epidemiological research on psychosocial functioning in children and adolescents has been carried out in many countries (Verhulst & Koot 1992). Early Norwegian epidemiological studies of children and adolescents, using screening instruments developed by Rutter and colleagues, found prevalence rates for emotional and behavioral problems ranging from 5-20 % depending on the child's gender, age and residence (rural vs. urban) (Lavik 1977, Vikan 1985, Borge 1994).

The Child Behavior Checklist (CBCL) and related material - Teacher's Report Form (TRF) and Youth Self-Report (YSR) - were developed by Achenbach and Edelbrock in the United States in the 1980s and are designed to measure a broad range of social competence and emotional and behavioral problems in children and adolescents, as reported by multiple informants - parents, teachers and adolescents themselves (Achenbach 1991 a, b, and c). These instruments have been validated and standardized in the United States, using large population surveys, and are considered to be among the most carefully developed and thoroughly validated assessment instruments of this kind (Verhulst & Koot 1992). The CBCL and related material have been translated into over 70 languages and have been used in numerous studies throughout the world (Achenbach 2006).

Verhulst and colleagues in the Netherlands were the first to introduce the CBCL (and related instruments) to Europe, in the early 1980s. They conducted a detailed standardization of the CBCL and TRF and compared the frequency of behavior problems in Dutch and American children (Verhulst et al. 1985, 1986). The CBCL has been widely used in epidemiological studies in Scandinavia since the late 1980s (Almqvist et al. 1988, Hannesdottir et al. 1995, Bilenberg 1999, Larsson and Frisk 1999 and Nøvik 1999). Nøvik's study demonstrated the effectiveness and validity of the CBCL as a screening instrument in Norway.

Parents' ratings are generally considered to be the best source of information on their child's behavioral problems. They are typically the most important adults in the child's life, spend most time with them, and generally know them best. Even if their judgement may be affected by their relationship with the child, their perceptions may be valid and useful for the child's development. Teachers are often the second most important informants about a child's functioning. Although seeing the child only in the classroom or playground, these contexts may reveal functioning difficulties not observable elsewhere. Teachers also have the ability to compare a particular child with other children of the same age and developmental level (Verhulst & Akkerhuis 1986). Teachers' perceptions of child behavior problems can, therefore, provide an important supplement to information supplied by parents.

TRF norms have been established for the US and for a number of other countries, including the Netherlands and Denmark. Recent Norwegian epidemiological studies employing the TRF have tended to focus on limited populations with special conditions or disabilities including hypercholesterolemia, mutism, dyslexia and low birthweight (Tonstad et al. 1996, Kristensen 2001, Heiervang et al. 2001, and Indredavik et al. 2005).

Aims of the study

1. To provide prevalence rates on a wide range of emotional and behavioral problems as reported by teachers for a sample of Norwegian school children from the general population aged 6-12 years, using the TRF.
2. To identify differences related to demographic variables including children's age, gender and place of residence.
3. To compare Norwegian results from this study with results from TRF studies in other cultures.

2. Method

Subjects and procedures

The study was conducted in five Norwegian municipalities in the county of Møre and Romsdal - Molde, Kristiansund, Averøy, Sunndal, and Surnadal. These vary in size and economic activity. The two larger municipalities, Kristiansund and Molde, have populations between 17000 - 24000. Molde is the site of the county administration, and both are commercial, educational and cultural centers for the county. The three smaller municipalities Averøy, Surnadal and Sunndal range in size from 5000 - 7500 inhabitants. Averøy, located on the coast, has an economy based largely on fishing and maritime industry. Surnadal's economy is based on agriculture, lumber and related industries including building and furniture. Sunndal, the largest in area, has an economy dominated by production of aluminium and electrical power.

The study, conducted in the spring of 2002, was a screening of all school children in grades 1-6, who were attending public school in these municipalities. School registration records show that there were 4685 pupils in grades 1-6 enrolled in 38 elementary schools. The screening was designed to measure parents' and teachers' perceptions of the children's emotional and behavioral problems using three American assessment instruments - the Eyberg Child Behavior Inventory (ECBI) for parents, the Preschool Behavior Questionnaire(PBQ) for preschool teachers, and the Teachers Report Form (TRF) for teachers. The present study includes only the results from the teacher survey. The results of the parent study are presented in a separate report (Reedtz et al. 2004).

The teacher screening was conducted using a Norwegian translation of the TRF (Achenbach 1991, Nøvik 1993). The form was to be filled out by teachers who had known the children for at least two months. The Regional Child Protection Research Unit in Trondheim (BUS) obtained approval from the school administrations in the five towns to participate in the study. Survey material including questionnaires, consent forms and information about the study was sent from BUS in March 2002 to the school administrations in the five towns. This material was then distributed to the indi-

vidual schools, and from there to the individual teachers, who sent it home to the parents with the children. Parents willing to participate in the survey returned the signed consent forms and completed ECBI surveys in a sealed envelope to the school. Parental consent was also required for teachers to fill out the TRF for each child.

Forms were anonymous (without names or birthdates), in order to protect the confidentiality of the children, parents and teachers. Each form had an identification code containing information about the town, school, grade level, and child's individual number in the class. Parents received no reimbursement for participating in the survey, while teachers received a fee of 500 Norwegian kroner (approximately 60 Euro) for each class. Mailing costs for return of the surveys was covered by BUS. Completed surveys were collected by the schools and returned to BUS by way of the school administrations. BUS had no direct contact with individual schools, teachers or parents. The local school administrations contacted some schools which were late in responding to make sure that all completed surveys were collected.

2890 questionnaires were completed and returned for a return rate of 62 %. 202 forms were removed from the analysis because of missing data and/or unusable identification numbers, leaving a total of 2688 forms, including 2380 with information on the child's gender and age. Forms with missing data on ten or fewer items have imputed values for these items using the expectation-maximization algorithm. The sample distribution is shown in Tables 1 and 2 below.

Table 1 - Distribution of sample by age and gender

<i>Age</i>	Boys	Girls	Total
6	71	58	129
7	182	183	365
8	190	207	397
9	196	213	409
10	216	194	410
11	216	176	392
12	128	150	278
Total	1199	1181	2380

Table 2 - Distribution of sample by town of residence

<i>Town</i>	N	%
Averøy	312	11.6
Kristiansund	602	22.4
Molde	1072	39.9
Sunndal	354	13.2
Surnadal	348	12.9
Total	2688	100.0

Ethics

The research project was approved by the Regional Committee for medical research ethics, Health Region IV, Norway and is registered with the national data supervisory board (Datatilsynet).

The survey instrument - the Teacher's Report Form (TRF)

The Teacher's Report Form (TRF), developed in the United States, in the 1980s, is an assessment instrument designed to measure social competency and behavioral and emotional problems in school children aged 5-18 years, as reported by their teachers. The problem items were derived from a survey of existing literature and analysis of the case histories of 1000 child psychiatric patients (Edelbrock & Achenbach 1984).

The TRF instrument used in the present study is based on the 1991 revision of this instrument as translated to Norwegian by T. S. Nøvik (Achenbach 1991, Nøvik 1993). Teachers in the present study received only the questions about children's behavioral and emotional problems. Social competency was not a focus of this study, so questions on this topic from the US version of the TRF were not included.

The problem scale of the TRF (see attachments) includes 119 items which describe different characteristics or problem behaviors which pupils may have displayed to some extent during the previous two months, for example, "Acts too young for his/her age". Teachers were instructed for each item to rate the pupil's behavior on a 3-point (Likert) scale from 0-2, where 0 indicates that the behavior does not fit that pupil (as

far as the teacher knows), 1 indicates that the characteristic fits to a certain extent or sometimes, and 2 indicates that the characteristic fits well or often. Teachers were instructed to answer all questions even those not considered relevant for that child. The instrument used in the present study includes one less problem item than the US instrument, which contained 118 specific problem behaviors and two open-ended items which permitted the teacher to write in other physical problems (56h) and other problems (113). Our instrument does not include the final open-ended item on other problems (113).

Total problem score and syndrome scores

A total problem score for each pupil was calculated by adding up the scores on the 119 individual problem items for each pupil. Total problem scores in this study may range from 0 to 238 (2×119). This is 2 points lower than the maximum possible US score of 240 (2×120).

Two broad-band syndrome scales have also been calculated which measure Internalizing and Externalizing problems. Syndromes refer to problems that tend to occur together. Achenbach and associates developed these syndrome scores empirically, using principal components analysis to identify groups of items whose scores covary with each other. Internalizing consists of scores on 35 problem items (may range from 0-70), and Externalizing consists of scores on 34 items (may range from 0-68, see attachments). These two categories reflect a distinction that has been detected in numerous multivariate analyses of children's behavioral and emotional problems. The two behavior types have been referred to under various labels including personality versus conduct problems (Petersen 1961), inhibition versus aggression (Miller 1967), and overcontrolled versus undercontrolled (Achenbach & Edelbrock 1978).

These broad-band syndrome scales have also been divided into narrower syndrome categories by Achenbach and associates using the same statistical techniques. They have identified 8 narrow-band syndrome scales: withdrawn, somatic complaints, and anxious depressed which make up the category internalizing; delinquent and aggressive behavior which make up the category externalizing; and social, thought and attention problems which are not included in the two broad-band scales. The syndromes derived are gender and age specific covering four groups: boys and girls 5-11 years, and boys and girls 12-18 years (Achenbach 1991).

Statistical Analysis

SPSS for Windows version 12.0 (SPSS Inc., Chicago, IL) was used for data analysis. The present study includes an analysis of the results for individual item scores, total problem scores, and for the two broad-band syndrome scores - Internalizing and Externalizing. These two syndrome scales are based on the same items identified empirically by Achenbach and associates (see Attachments 2 and 3). Results are presented for the total sample of 2688 pupils as well as for groups based on gender, age and place of residence. Place of residence is analyzed using a dichotomous variable with two categories larger municipalities (Molde and Kristiansund) and smaller municipalities (Averøy, Sunndal and Surnadal).

Differences between group means were compared for gender, age and place of residence using t-tests for independent groups and analysis of variance (ANOVAs). T-tests were used for the dichotomous variables gender and place of residence. One-way ANOVAs were used for age which has 7 categories for each year 6-12. Two-way ANOVAs were used to examine possible combined effects and interactions between gender and age.

These parametric tests were used despite the somewhat non-normal distribution of scores for total problems, internalizing, and externalizing. Large numbers of pupils had low scores on each of these three scales, resulting in distributions with positive skew and kurtosis, peaked to the left-hand side of the distribution. Previous research has shown these tests to be reliable for non-normal distributions for sufficiently large samples because of the Central Limit Theorem. Sample sizes of 30-50 or more are usually sufficient for this purpose (Lumley et al. 2002, Boneau 1960). This study with a total sample size of 2688, and large subgroups for each gender, age and residence category is more than large enough.

The effect size of differences in group means has also been calculated because tests of statistical significance may be affected greatly by sample size. Statistically significant differences between group means are often found with large sample size, even though the effect size may be quite weak (Cortina & Nouri 2000). The effect size was calculated using Cohen's *d* statistic for comparing two group means, and eta square for comparing means for more than two groups. These have been interpreted using Cohen's definitions for *d*, where 0.2 is defined as a small effect size, 0.5 as a medium effect size, and 0.8 as a large effect size (Cohen 1988). Effect sizes for eta square for

ANOVA are by convention interpreted as 0.01 is small, 0.06 is medium, and 0.14 is large (Green & Salkind 2003).

3. Results

Individual item scores

Table 3 below contains the individual problem item scores for all children (N=2688) ranked in descending order by the percentage of pupils displaying each behavior. These percentages include all pupils who received a score of either 1 or 2 on that item. The mean (M) and standard deviation (SD) for each item follows.

Table 3 - Individual problem item scores

Rank	Item	Percentage with behavior	M	SD
1	Inattentive, easily distracted	23.9	0.30	0.58
2	Disturbs other pupils	22.1	0.25	0.51
3	Can't concentrate, can't pay attention for long	21.4	0.28	0.58
4	Feels hurt when criticized	21.4	0.24	0.48
5	Talks out of turn	21.2	0.26	0.54
6	Demands a lot of attention	19.2	0.24	0.52
7	Talks too much	18.9	0.22	0.49
8	Shy or timid	18.8	0.20	0.44
9	Self-conscious or easily embarrassed	18.5	0.20	0.43
10	Difficulty following directions	18.3	0.22	0.50
11	Daydreams or gets lost in his/her thoughts	18.2	0.21	0.47
12	Fails to finish things he/she starts	18.0	0.22	0.50
13	Messy work	17.7	0.21	0.49
14	Disrupts class discipline	17.7	0.21	0.49
15	Argues a lot	17.0	0.20	0.46
16	Fears he/she might think or do something bad	15.6	0.17	0.41
17	Is afraid of making mistakes	14.7	0.16	0.40
18	Impulsive or acts without thinking	14.5	0.17	0.42
19	Poor school work	14.5	0.17	0.44
20	Has difficulty learning	14.3	0.18	0.46
21	Can't sit still, restless, or hyperactive	13.3	0.16	0.45
22	Underachieving, not working up to potential	13.2	0.15	0.42
23	Showing off or clowning	13.1	0.16	0.42
24	Feels he/she has to be perfect	12.9	0.15	0.41

25	Confused or seems to be in a fog	12.5	0.14	0.39
26	Stubborn, sullen, or irritable	12.3	0.14	0.39
27	Fails to carry out assigned tasks	12.0	0.14	0.42
28	Doesn't get along with other pupils	11.5	0.13	0.36
29	Teases a lot	11.4	0.13	0.37
30	Acts too young for his/her age	11.0	0.14	0.42
31	Fidgets	10.1	0.12	0.39
32	Cruelty, bullying, or meanness to others	10.0	0.11	0.35
33	Defiant, talks back to staff	10.0	0.12	0.37
34	Sulks a lot	9.9	0.11	0.34
35	Hums or makes other odd noises in class	9.6	0.12	0.39
36	Nervous, high-strung, or tense	9.3	0.10	0.32
37	Physically attacks people	9.2	0.10	0.33
38	Poorly coordinated or clumsy	9.2	0.11	0.36
39	Feels others are out to get him/her	9.2	0.10	0.33
40	Worries	9.1	0.10	0.32
41	Apathetic or unmotivated	9.0	0.10	0.34
42	Feels worthless or inferior	8.6	0.10	0.32
43	Demands must be met immediately, easily frustrated	8.6	0.10	0.35
44	Not liked by other pupils	8.4	0.09	0.31
45	Sudden changes in mood or feelings	8.2	0.09	0.33
46	Swearing or obscene language	8.1	0.09	0.33
47	Disobedient at school	8.1	0.09	0.33
48	Too fearful or anxious	8.0	0.09	0.30
49	Underactive, slow moving, or lacks energy	7.8	0.09	0.33
50	Gets in many fights	7.5	0.08	0.31
51	Doesn't seem to feel guilty after misbehaving	7.4	0.09	0.33
52	Bragging, boasting	7.2	0.08	0.30
53	Secretive, keeps things to self	7.1	0.08	0.29
54	Gets teased a lot	7.0	0.08	0.29
55	Hangs around with others who get in trouble	7.0	0.08	0.30
56	Clings to adults or too dependent	6.8	0.08	0.31
57	Tardy to school or class	6.6	0.08	0.32
58	Lying or cheating	6.5	0.07	0.27
59	Unhappy, sad, or depressed	6.3	0.07	0.27
60	Temper tantrums or hot temper	6.2	0.08	0.32
61	Overweight	6.2	0.08	0.31
62	Whining	6.1	0.06	0.25
63	Behaves irresponsibly	6.1	0.07	0.27
64	Headaches	6.0	0.07	0.31
65	Would rather be alone than with others	5.7	0.06	0.27
66	Overly anxious to please	5.5	0.06	0.25
67	Overconforms to rules	5.3	0.06	0.25
68	Speech problem	5.2	0.07	0.30

69	Unusually loud	5.2	0.06	0.28
70	Suspicious	5.1	0.06	0.25
71	Explosive or unpredictable behavior	4.8	0.06	0.28
72	Stomachaches or cramps	4.6	0.05	0.25
73	Easily jealous	4.5	0.05	0.25
74	Nausea, feels sick	4.5	0.05	0.24
75	Prefers being with younger children	4.4	0.05	0.25
76	Complains of loneliness	4.4	0.05	0.24
77	Withdrawn, doesn't get involved with others	4.2	0.05	0.25
78	Dislikes school	4.0	0.05	0.25
79	Fears certain animals, situations, or places other than school	3.9	0.04	0.23
80	Prefers being with older children or youths	3.8	0.04	0.23
81	Gets hurt a lot, accident-prone	3.7	0.04	0.23
82	Overtired	3.6	0.04	0.22
83	Strange behavior	3.6	0.04	0.22
84	Refuses to talk	3.5	0.04	0.21
85	Picks nose, skin, or other parts of body	3.4	0.04	0.23
86	Cries a lot	3.4	0.04	0.21
87	Stares blankly	3.2	0.03	0.19
88	Stores up things he/she doesn't need	3.2	0.04	0.22
89	Threatens people	3.2	0.03	0.20
90	Can't get his/her mind off certain thoughts; obsessions	2.9	0.03	0.21
91	Feels or complains that no one loves him/her	2.8	0.03	0.21
92	Screams a lot	2.8	0.03	0.20
93	Bites fingernails	2.7	0.03	0.20
94	Nervous movements or twitching	2.7	0.03	0.19
95	Strange ideas	2.6	0.03	0.17
96	Aches or pains not headaches	2.3	0.03	0.18
97	Other physical problems	2.3	0.03	0.21
98	Destroys his/her own things	2.2	0.03	0.19
99	Problems with eyes	2.0	0.02	0.16
100	Seems preoccupied with sex	1.9	0.02	0.17
101	Sleeps in class	1.9	0.02	0.15
102	Feels too guilty	1.8	0.02	0.14
103	Too concerned with neatness or cleanliness	1.7	0.02	0.15
104	Destroys property belonging to others	1.7	0.02	0.16
105	Rashes or other skin problems	1.6	0.02	0.17
106	Fears going to school	1.6	0.02	0.14
107	Feels dizzy	1.4	0.02	0.15
108	Truancy or unexplained absence	1.4	0.02	0.16
109	Unclean personal appearance	1.3	0.02	0.14
110	Repeats certain acts over and over, compulsions	0.9	0.01	0.13

111	Steals	0.9	0.01	0.11
112	Behaves like opposite sex	0.8	0.01	0.11
113	Eats or drinks things that are not food	0.7	0.01	0.11
114	Sees things that aren't there	0.6	0.01	0.08
115	Talks about killing self	0.4	0.00	0.08
116	Vomiting, throwing up	0.3	0.00	0.07
117	Hears sounds or voices that aren't there	0.2	0.00	0.06
118	Deliberately harms self or attempts suicide	0.1	0.00	0.05
119	Uses alcohol or drugs for non-medical purposes	0.0	0.00	0.00

The percentage of pupils displaying individual problem items varied considerably. Teachers reported that no pupils “use alcohol or drugs for non-medical purposes” while nearly one-fourth of all pupils were described as “inattentive, easily distracted” at least somewhat or sometimes during the previous two months, which was the problem item which fit the behavior of the largest number of pupils. This also indicates that none of the behavior problems were very common for these pupils. The twenty problem items reported most often by teachers were displayed by from one-seventh to one-fourth of all pupils.

The kinds of problems displayed most frequently by pupils fall into three categories - the narrow-band syndrome attention problems and the two broad-based syndromes internalizing and externalizing, (based on Achenbach's syndrome categories). Nine of the twenty problem items displayed by the most pupils were attention problems, including the first and third most common problems “inattentive easily distracted”, and “can't concentrate, can't pay attention for long”. Six of the twenty most common problems were externalizing items, including four of the seven most common items “disturbs other pupils”, “talks out of turn”, “demands a lot of attention” and “talks too much”. The remaining five most common behavior problems were internalizing problems, including three of the ten most common: “feels hurt when criticized”, “shy or timid” and “self-conscious or easily embarrassed”. The twenty least frequent behavior problems were quite uncommon, being displayed by fewer than 2 % of all pupils, including “uses alcohol or drugs for non-medical purposes”, which was not displayed by any of the pupils.

Teachers were more likely to respond that the problem items fit the behavior of their pupils somewhat or sometimes (response 1), rather than well or often (response 2). The problem items receiving the most 2 scores were given to only 5-7 % of all pupils. These were two attention problems: “can't concentrate, can't pay attention for long”

and “inattentive, easily distracted”, followed by two externalizing problems “talks out of turn” and “demands a lot of attention”.

Gender differences in problem items

Table 4 and 5 below display the ten most frequent problem items for boys and girls. These show clear gender differences both in terms of what proportion of boys and girls displayed the most common problem items, and which kind of problems were most typical for each gender.

Table 4 - Individual item scores - boys

Rank	Item	Percentage with behavior	M	SD
1	Disturbs other pupils	32.3	0.37	0.58
2	Inattentive, easily distracted	32.2	0.41	0.64
3	Can't concentrate, can't pay attention for long	29.5	0.40	0.67
4	Talks out of turn	29.5	0.37	0.62
5	Disrupts class discipline	26.7	0.33	0.58
6	Talks too much	26.1	0.32	0.58
7	Difficulty following directions	25.3	0.31	0.57
8	Fails to finish things he/she starts	25.1	0.31	0.58
9	Feels hurt when criticized	24.4	0.28	0.52
10	Messy work	24.3	0.30	0.56

Table 5 - Individual item scores - girls

Rank	Item	Percentage with behavior	M	SD
1	Self-conscious or easily embarrassed	20.2	0.22	0.46
2	Shy or timid	19.7	0.21	0.45
3	Feels hurt when criticized	18.7	0.20	0.44
4	Fears he/she might think or do something bad	17.4	0.19	0.43
5	Is afraid of making mistakes	16.1	0.17	0.41
6	Inattentive, easily distracted	15.7	0.19	0.48
7	Feels he/she has to be perfect	15.0	0.17	0.43
8	Demands a lot of attention	14.3	0.17	0.44
9	Daydreams or gets lost in his/her thoughts	14.3	0.16	0.42
10	Talks out of turn	13.1	0.15	0.42

Boys displayed the most common problems more often than girls. While 24-32 % of boys exhibited the ten most common problem items, the corresponding percentages for girls were only from 13-20 %.

Boys and girls also displayed different types of problems most frequently. Only three of the top ten problem items by gender appear on the lists for both boys and girls - “inattentive, easily distracted”, “feels hurt when criticized” and “talks out of turn” (though not in the same order). The ten problem items displayed by the largest number of boys were mainly in the categories attention problems and externalizing. Half of these were attention problems including the second and third most frequent items “inattentive, easily distracted” and “can’t concentrate, can’t pay attention for long”. Four of the six most frequent problems for boys were externalizing items, including the most frequent problem of all - “disturbs other pupils”. The final item in the top ten for boys was an internalizing problem - “feels hurt when criticized”.

Girls’ ten most frequent problems show a different pattern. Six of these items, including all of the top five items, are internalizing problems - led by “self-conscious or easily embarrassed” and “shy or timid”, which were both displayed by one-fifth of all girls. The other four most common include two attention problems - “inattentive, easily distracted” and “daydreams or gets lost in his/her thoughts”, and two externalizing items - “demands a lot of attention” and “talks out of turn” which are ranked eighth and tenth for girls.

Scale scores: total problems, internalizing and externalizing

Scores for total problems, internalizing and externalizing were calculated for all pupils, and for groups based on the gender and age of the children, and on the population of the town where they resided.

Total problem scores

Total problem scores for all pupils aged 6-12 years (N=2688) ranged from 0-125 with a mean of 10.6 and a standard deviation of 15.1. The distribution of total problem scores is positively skewed (2.66) and peaked on the left-hand side of the distribution with kurtosis (9.57). Many of the pupils had very low scores, while relatively few had

high total problem scores. Over one-fifth of the pupils (22 %) scored zero on total problems, nearly half of the pupils (49 %) scored less than 5 on this scale, and over two-thirds (68 %) scored below the mean. Ninety percent of pupils had total problem scores of 30 or below.

Table 6 below gives the mean and standard deviation of total problem scores by gender and age for 2380 children aged 6-12 years. 308 children were missing information on gender and/or age.

Table 6 - Total problem scores by age and gender

Age	Gender	N	M	SD
6	Girls	58	8.2	14.9
	Boys	71	11.0	10.7
	Total	129	9.8	12.8
7	Girls	183	8.8	14.3
	Boys	182	14.8	19.4
	Total	365	11.8	17.3
8	Girls	207	5.9	8.7
	Boys	190	13.6	15.8
	Total	397	9.6	13.1
9	Girls	213	6.7	10.3
	Boys	196	13.4	16.1
	Total	409	9.9	13.8
10	Girls	194	9.2	13.8
	Boys	216	13.7	18.3
	Total	410	11.6	16.5
11	Girls	176	7.5	10.4
	Boys	216	14.5	17.9
	Total	392	11.3	15.4
12	Girls	150	7.6	13.8
	Boys	128	12.3	17.3
	Total	278	9.7	15.7
Total	Girls	1181	7.6	12.1
	Boys	1199	13.7	17.2
	Total	2380	10.6	15.2

The total problem scores for all pupils with known gender and age (N=2380) had a mean of 10.6 and a standard deviation of 15.2. Boys had more total problems than girls overall (M=13.7 vs. 7.6) and the group mean differences were statistically significant at $p < .001$ level. The largest gender difference is at age 8 where boys had more than twice as many total problems as girls on average (M=13.6 vs. 5.9). Mean total problem scores ranged from 5.9 for 8 year old girls to 14.8 for 7 year old boys.

Gender differences are also significant for all age groups other than 6 years, with significance at level $p < .05$ for age 12, $p < .01$ for age 10, and $p < .001$ for the other age groups. Effect sizes for gender differences are in the small to medium range based upon Cohen's d statistic (where .20 is defined as small, .50 medium, and .80 large, Cohen 1988). The effect size was .40 for total gender differences and ranged from .22 for 6 year olds to .60 for 8 year olds.

Age differences for total problems were not statistically significant (one-way ANOVA) and had very small effect size (eta square $< .01$). Pupils aged 7, 10 and 11 had the highest total problem scores with means ranging from 11.3 to 11.6, while the other four age groups (6, 8, 9, 12) had somewhat lower total problem scores with means ranging from 9.6 to 9.9.

A two-way ANOVA for gender and age combined revealed a significant main effect for gender at the 0.01 level ($F(1, 2366) = 73.0$; $p < .01$). There was a small effect size for gender (Eta square $< .03$). There was no significant main effect for age, and no significant interaction between age and gender for total problem scores.

Internalizing Problem Scores

Internalizing scores for all pupils (N=2688) range from 0-36 with $M = 2.7$ and $SD = 4.3$. The distribution of scores is positively skewed (2.6) and peaked to the left of the distribution, kurtosis (9.2). As for total problems scores, many pupils had low internalizing scores, while relatively few had higher scores. 42 % of pupils scored zero on internalizing problems, 13 % scored 1 on this scale, 11 % scored 2, meaning that nearly two-thirds scored below the mean of 2.7. Ninety percent of pupils had internalizing scores of 7 or below. Table 7 below displays the internalizing problem scores for pupils by gender and age (N=2380).

Table 7 - Internalizing problem scores by age and gender

Age	Gender	N	M	SD
6	Girls	58	2.7	4.7
	Boys	71	2.3	4.4
	Total	129	2.5	4.0
7	Girls	183	3.3	5.3
	Boys	182	3.0	4.2
	Total	365	3.2	4.8
8	Girls	207	2.0	3.2
	Boys	190	2.7	4.1
	Total	397	2.4	3.7
9	Girls	213	2.3	3.6
	Boys	196	2.4	3.9
	Total	409	2.3	3.8
10	Girls	194	3.4	4.6
	Boys	216	2.9	4.5
	Total	410	3.1	4.6
11	Girls	176	3.1	4.2
	Boys	216	3.1	5.0
	Total	392	3.1	4.6
12	Girls	150	3.0	4.8
	Boys	128	2.5	4.0
	Total	278	2.8	4.4
Total	Girls	1181	2.8	4.3
	Boys	1199	2.8	4.3
	Total	2380	2.8	4.3

The mean internalizing score for all pupils with known gender and age was 2.8 with a standard deviation of 4.3. Age differences in mean internalizing scores were statistically significant at the level of $p < .05$ (one-way ANOVA). There was a very small effect size (eta square = .01).

Pupils aged 7, 10 and 11 had the highest mean internalizing scores ($M = 3.1 - 3.2$), while those aged 6, 8, and 9 years had the lowest internalizing scores ($M = 2.3-2.5$). 12 year olds fell in between ($M = 2.8$).

Internalizing scores did not differ by gender, with boys and girls having identical group means and standard deviations ($M = 2.8$, $SD = 4.3$).

Two-way ANOVAs for gender and age for internalizing scores revealed a significant main effect for age at the $p < .05$ level ($F(6, 2366) = 2.7$; $p < .05$). There was a very small effect size (Eta square $< .01$). Pair-wise comparisons of age differences for the seven age groups revealed no significant differences. There was no significant main effect for gender, and no significant interaction between age and gender for internalizing scores.

Externalizing problem scores

Externalizing scores for all pupils ($N = 2688$) ranged from 0-56 with $M = 3.4$ and $SD = 6.6$. The distribution was positively skewed (3.3) and peaked to the left of the distribution, kurtosis 13.6. Half of the pupils scored zero on externalizing problems. 12 % each scored 1 and 2, meaning nearly three quarters (74 %) had scores below the mean. Ninety percent had scores of 10 or less. Table 8 below displays the mean and standard deviation of externalizing scores by gender and age for pupils with known gender and age ($N = 2380$).

Table 8 - Externalizing problem scores by age and gender

Age	Gender	N	M	SD
6	Girls	58	2.6	6.6
	Boys	71	4.5	5.5
	Total	129	3.7	6.1
7	Girls	183	2.6	5.7
	Boys	182	5.8	8.9
	Total	365	4.2	7.6
8	Girls	207	1.7	4.0
	Boys	190	5.0	6.8
	Total	397	3.3	5.7
9	Girls	213	1.9	4.7
	Boys	196	4.9	7.4
	Total	409	3.3	6.3
10	Girls	194	2.3	5.1
	Boys	216	4.8	8.0
	Total	410	3.6	6.8
11	Girls	176	1.3	2.8
	Boys	216	4.9	8.2
	Total	392	3.3	6.5
12	Girls	150	2.1	6.0
	Boys	128	4.0	7.6
	Total	278	3.0	6.8
Total	Girls	1181	2.0	4.9
	Boys	1199	4.9	7.7
	Total	2380	3.5	6.6

The mean externalizing score for all pupils with known gender and age was 3.5, with a standard deviation of 6.6. Boys had higher mean externalizing scores than girls ($M = 4.9$ vs. 2.0), and this difference is significantly significant at $p < .001$ level. The mean scores for gender/age groups range from 1.3 for 11 year old girls to 5.8 for 7 year old boys.

Boys had higher mean externalizing scores at each age level, with the largest difference occurring at age 11 ($M = 4.9$ vs. 1.3). These gender differences are statistically significant at all ages other than 6 years. Significance levels were $p < .001$ for all ages other than 12 years, where significance was at the $p < .05$ level. Effect sizes for gender differences were in the small to medium range, with Cohen's $d = 0.45$ for overall gender differences. These ranged from 0.28 for age 12 to 0.59 for ages 8 and 11.

Age differences for mean externalizing scores were not statistically significant and had very small effect size (eta square $< .01$). These ranged from $M = 3.0$ at age 12 to $M = 4.2$ at age 7. There seems to be a tendency towards decreasing externalizing scores as the children become older with the highest mean scores at ages 6-7 years and the lowest at age 12, though 10 year olds have somewhat higher mean scores than 8 and 9 year olds ($M = 3.6$ vs. 3.3).

Two-way ANOVAs for gender and age revealed a significant main effect for gender at the $p < .01$ level ($F(1, 2366) = 91.6$; $p < .01$) with boys displayed more externalizing problems than girls ($M = 4.8$ vs. 2.1). There was a small effect size for gender 0.04 (Eta square = .04). There was no significant main effect for age, and no significant interaction between age and gender on this scale.

Effects of town size

The effects of town size on scores for total problems, internalizing and externalizing were examined for two categories – smaller towns with population 5000 - 7500 (Averøy, Sunndal and Surnadal) and larger towns with population 17000 - 24000 (Molde and Kristiansund). 62 % of pupils in the study resided in the larger towns. Table 9 below gives the range, mean, and standard deviation by town size.

Table 9 - Total problems, internalizing and externalizing by town size

Town size	Scale	N	Range	Mean	Standard Deviation
Smaller	Total Problems	1014	0-125	11.1	15.8
	Internalizing	1014	0-26	2.5	3.8
	Externalizing	1014	0-55	3.8	7.0
Larger	Total Problems	1674	0-124	10.3	14.6
	Internalizing	1674	0-36	2.9	4.9
	Externalizing	1674	0-56	3.2	6.3

There were relatively small differences in group scores for total problems, internalizing and externalizing based on town size. The smaller towns have higher mean scores for total problems ($M = 11.1$ vs. 10.3) and for externalizing ($M = 3.8$ vs. 3.2), while the larger towns have higher mean scores for internalizing problems ($M = 2.9$ vs. 2.5). The mean differences for both internalizing and externalizing problems were statistically significant at the $p < .05$ level, with very small effect sizes ($d = .09$), using Cohen's categories (Cohen 1988). The differences in total problem scores were not statistically significant.

4. Discussion

This study has examined the behavioral/emotional problems as rated by teachers of 2688 elementary school pupils aged 6-12 years from 5 municipalities in the county of Møre and Romsdal in Norway. The results show differences related to the three socio-demographic variables, gender, age and town population size for one or more of the problem scales for total problems, internalizing and externalizing. Gender had the largest effect for total problems and externalizing which confirms findings from earlier studies with the TRF. Scores on the three problem scales from the present study are lower than results from other countries, but are more consistent with several previous Norwegian studies with the TRF.

Gender is the variable which had the greatest effect on problem scores in the present study. Boys displayed more total problems and more externalizing problems than girls overall, and for each age group. Internalizing scores were the same for both groups. The differences were statistically significant with small to medium effect sizes for boys and girls overall, and in each age group other than age 6. Gender differences were also found in responses to individual problems items. Boys displayed the most common problem items for their gender, more often than girls displayed the problem items most common for theirs. The types of problems most frequently displayed by each gender also differed. The ten most prevalent problems for boys were mainly attention and externalizing problems, while girls' most prevalent items were internalizing problems (including all of the five most prevalent items).

This finding confirms the results of previous studies which have found boys with higher total problem and externalizing problem scores than girls. A cross-cultural study of total problem scores on the TRF found that boys scored higher than girls in four countries (Verhulst & Achenbach 1995). TRF standardizations in the USA, Denmark and the Netherlands also found higher scores for boys than girls on total problems and on externalizing in the USA and Denmark (Achenbach 1991, Bilenberg 1999, Verhulst & Akkerhuis 1986). An earlier Norwegian study found that boys scored higher than girls on total problems, externalizing and internalizing (Tonstad et al. 1996).

Age differences in the present study were statistically significant for internalizing problems only, but with a very small effect size. Pupils aged seven, ten and eleven scored highest on all three problems scales. Six year olds also had high externalizing scores. Other TRF studies have shown few significant age differences. Only one comparison in the Verhulst & Achenbach study showed significant age differences for total problems, with older children showing higher scores than younger children. No significant age differences were found for total problems in the standardization studies for the US, Denmark and the Netherlands (Achenbach 1991, Bilenberg 1999, Verhulst & Akkerhuis 1986).

Differences in town size were statistically significant for both internalizing and externalizing problems, with pupils from the smaller towns displaying more externalizing problems, while those from the larger towns displayed more internalizing problems. The effect size of these differences was very small. The result for internalizing problems is consistent with previous studies which have tended to find a greater risk for various behavior problems in children from urban areas as compared to rural areas (Rutter et al. 1975, Kastrup 1976, Offord et al. 1987). The opposite result for externalizing problems may perhaps be explained by the fact that all of the five towns in the present study are relatively small (fewer than 25,000 inhabitants) and would likely not be considered urban by international standards.

Individual problem item scores in the present study show several interesting trends, including the gender differences discussed above. All of the individual problem items, including those with the highest prevalence rates, are relatively uncommon for most of the pupils in this study. The most prevalent problem “inattentive, easily distracted” was displayed by less than one-fourth of all pupils (item score of 1 or 2), and most items were displayed by far fewer pupils. Teacher’s were much more likely to report that if an individual item fit the behavior of a pupil at all, it most likely fit somewhat or sometimes (alternative 1), rather than well or often (alternative 2). The items receiving the largest number of 2-scores, received this score for only 7 % of all pupils. The twenty most common behavior problems fell into three categories (based on the syndrome scores developed for the TRF by Achenbach and colleagues). Nearly half were attention problems, with the remaining items nearly evenly divided between externalizing and internalizing problems.

Comparison with previous TRF studies in Norway and other countries

TRF scores for the present study for total problems, internalizing and externalizing are lower than those reported by teachers in other countries. Mean total problem scores on the TRF for six countries - China, Jamaica, the Netherlands, Puerto Rico, Thailand and the USA ranged from 17.6 for the Netherlands to 39.0 for a rural Chinese sample as compared to 10.6 for the present study (Verhulst & Achenbach 1995). Mean problem scores by gender were also lower in the present study than in standardization studies from the USA, the Netherlands and Denmark (Achenbach 1991, Verhulst & Akkerhuis 1986, and Bilenberg 1999), as shown in Table 10 below.

Table 10 - Mean problem scores for present study, USA, Netherlands and Denmark

<i>Study</i>	N	Age in years	Total problem	Internalizing	Externalizing
<i>Gender</i>	Boys/Girls		Boys/Girls	Boys/Girls	Boys/Girls
Present	1199/1181	6-12	13.7/7.6	2.8/2.8	4.9/2.0
USA	334/379	5-11	23.5/17.2	5.3/5.5	7.2/4.2
Denmark	119/131	6-10	20.7/12.2	5.5/5.3	6.5/2.8
Netherlands	351/410	6-11	21.2/14.8		

While scores for the other three countries are quite similar, scores for the present study are significantly lower for both boys and girls on all three scales. Scandinavian children have scored lower than children from other countries on behavior problem scales in other comparative studies. A twelve country study of children's behavior problems as reported by parents on the CBCL found that Swedish children scored lowest of all on total problems, externalizing and internalizing problems (Crijnen et al. 1997). Interpretation of such cross-cultural differences is complicated, and may indicate real differences in prevalence of behavior problems or simply different thresholds for reporting such problems by parents and teachers in different cultures (Bird 1996).

Norms for the TRF have not been published for Norway for a broad, representative sample of school children. A number of recent Norwegian epidemiological studies have used the TRF to measure behavior problems in various special populations (for example children with hypercholesterolemia, dyslexia, mutism, or low birth weight) as compared to a small control group from the general population (Tonstad et al. 1996, Kristensen 2001, Heiervang et al. 2001, Indredavik et al. 2005). These studies have smaller sample sizes and different age ranges than the present study, but still show

TRF problem scores for control groups drawn from the general population which are similar to those of the present study.

Table 11 - Mean problem scores for present study and previous Norwegian studies

<i>Study</i>	<i>N</i>	<i>Age in years</i>	<i>Total problem</i>	<i>Internalizing</i>	<i>Externalizing</i>
Present	2380	6-12	10.6	2.8	3.4
Kristensen	96	4-16	9.8	3.2	3.1
Heiervang	25	10-12	5.7	2.2	1.3
Indredavik	83	14	12.3	2.9	3.7

Table 11 shows mean scores for total problems, internalizing, and externalizing for the present study which are quite consistent with those of the Kristensen and Indredavik studies. The Heiervang study (with a much smaller sample size) has consistently lower scores than the other three on all three scales. Another Norwegian study which analyzed gender differences on the TRF found results for girls which were similar to the present study, while boys had generally higher results than in the present study (see Table 12 below).

Table 12 - Mean problem scores by gender for present study and Tonstad study

<i>Study</i>	<i>N</i>	<i>Age in years</i>	<i>Total problem</i>	<i>Internalizing</i>	<i>Externalizing</i>
<i>Gender</i>	Boys/Girls		Boys/Girls	Boys/Girls	Boys/Girls
Present	1199/1181	6-12	13.7/7.6	2.8/2.8	4.9/2.0
Tonstad	77/84	7-12	17.8/8.4	4.6/3.6	5.9/2.0

Some limitations of the present study should be acknowledged. The study includes data from teachers for a large sample of 2688 children from five towns in the county of Møre and Romsdal. The 62 % response rate is considered good for a questionnaire study of this kind in which respondents fill out the instrument on their own without researchers present (Babbie 1979). Despite the sample size and response rate, the possibility of non-response bias cannot be ruled out. Data was not collected which would make it possible to examine possible differences between pupils whose parents consented to participation and those who did not. Some previous studies have found systematic differences between responding and non-responding families, with non-responders often displaying a higher proportion of various kinds of problems (Cox et al. 1977). Other studies indicate that this is not always be the case. One study of ten-

year old Norwegian children as reported by school psychologists and public health nurses found that the prevalence of problems among non-responders did not differ from that of the responders (Vikan 1985).

A second question is the issue of generalizability of the findings from the present study to a broader population. Assuming no serious non-response bias, the results should be generalizable at least to the county of Møre and Romsdal, since these towns include a reasonable cross-section of the county, with variation in population size and type of economic activity. The results may not be representative of Norwegian school children in general, since no larger more urbanized Norwegian cities with more diverse populations, including larger proportions of non-European immigrants, are included in the present study. As noted above, several studies have found a higher prevalence of behavior problems in children from urban areas as compared to rural areas (Rutter et al. 1975, Kastrup 1976, Offord et al. 1987).

Finally, the version of the TRF used in the present study differs from the US instrument in two respects which can make valid cross-cultural comparisons more difficult. The present study includes only questions on emotional and behavioral problems, but not those on the pupils' social and academic competence. This is a limitation if one wishes to compare the pupils functioning and not just their problems. In addition, the maximum total problem score on the present study is 238 (119 x 2) as compared to 240 on the US instrument (120 x 2). This is because of the omission of the open-ended problem item (nr. 113), which enabled teachers to write-in additional problems not covered by the other items. Mean total problem scores for the present study may, therefore, be slightly lower than would have been the case if this item had been included. This difference, however, can at most account for only a small portion of the lower total problem scores on the present study as compared to the USA and other countries.

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Attachments

Attachment 1	Teacher's Report Form (emotional/behavioral problem items)
Attachment 2	TRF internalizing problems subscale
Attachment 3	TRF externalizing problems subscale

Attachment 1

Teacher's Report Form (emotional/behavioral problem items)

Attachment 2

TRF internalizing problems subscale

Item	Characteristic
12	Complains of loneliness
14	Cries a lot
31	Fears he/she might think or do something bad
32	Feels he/she has to be perfect
33	Feels or complains that no one loves him/her
34	Feels others are out to get him/her
35	Feels worthless or inferior
42	Would rather be alone than with others
45	Nervous, high-strung or tense
47	Overconforms to rules
50	Too fearful or anxious
51	Feels dizzy
52	Feels too guilty
54	Overtired
56a	Aches or pains (not headaches)
56b	Headaches
56c	Nausea, feels sick
56d	Problems with eyes
56e	Rashes or other skin problems
56f	Stomachaches or cramps
56g	Vomiting, throwing up
65	Refuses to talk
69	Secretive, keeps things to self
71	Self-conscious or easily embarrassed
75	Shy or timid
80	Stares blankly
81	Feels hurt when criticized
88	Sulks a lot
89	Suspicious
102	Underactive, slow moving, or lacks energy
103	Unhappy, sad, or depressed
106	Overly anxious to please
108	Is afraid of making mistakes
111	Withdrawn, doesn't get involved with others
112	Worries

Attachment 3

TRF externalizing problems subscale

Item	Characteristic
3	Argues a lot
6	Defiant, talks back to staff
7	Bragging, boasting
16	Cruelty, bullying, or meanness to others
19	Demands a lot of attention
20	Destroys his/her own things
21	Destroys property belonging to others
23	Disobedient at school
24	Disturbs other pupils
26	Doesn't seem to feel guilty after misbehaving
27	Easily jealous
37	Gets in many fights
39	Hangs around with others who get in trouble
43	Lying or cheating
53	Talks out of turn
57	Physically attacks people
63	Prefers being with older children or youths
67	Disrupts class discipline
68	Screams a lot
74	Showing off or clowning
76	Explosive and unpredictable behavior
77	Demands must be met immediately, easily frustrated
82	Steals
86	Stubborn, sullen, or irritable
87	Sudden changes in moods or feelings
90	Swearing or obscene language
93	Talks too much
94	Teases a lot
95	Temper tantrums or hot temper
97	Threatens people
98	Tardy to school or class
101	Truancy or unexplained absence
104	Unusually loud
105	Uses alcohol or drugs for nonmedical purposes

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TEACHER'S REPORT FORM

Below is a list of items that describe pupils. For each item that describes the pupil now or within the past 2 months, please circle the 2 items that are **most true** of the pupil. Circle the 1 if the item is **sometimes** true of the pupil. If the item is **not true** of the pupil, circle the 0. Please answer all items as well as you can, even if some do not seem to apply to this pupil.

[illegible]

PAGE 3

Please see other side

PAGE 4

PLEASE BE SURE YOU HAVE ANSWERED ALL ITEMS

Figure 1-2. Problem Items 1-56h of the TRF. Superscript *a* indicates items that replace those on the CBCL/4-18.

Figure 1-2 (cont.) Problem items 57-113 of the TRF. Superscript *a* indicates items that replace those on the CBCL/4-18.